STATISTICS

OF

OBSTETRIC PRACTICE

IN

MONTROSE.

BY

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Montrose 4 May 1850

Sir,

I have perused with much
interest yr paper in the Monthly Jour-
nal detailing a case of Arm presenta-
tion terminated by Spontaneous Evo-
lution, & take the liberty to forward
the accompanying report to which (p. 4) is
briefly mentioned a similar case wh
occurred to myself. The description
of yr case, i.e. as to its presentation
& manner of delivery, exactly tallies
with my own, and yr accounts
of the mechanism of such delivery

4

is speedily persuaded the circum-
ine.
From the cases of this
kind now on record there seem
deducible one important inference
viz that in arm presentation
the period has passed at which
turning is practicable there is
reason to expect that the unaided
efforts of nature will achieve
delivery, more especially if, as
usually happens, the uterine ac-
-tion is powerful, and other
favorable circumstances present
in

in your case be Concurrent,

Hon. Sir

Yrs very Respectfully

Wm Lawrence

Dr Dyce
Aberdeen

STATISTICS OF OBSTETRIC PRACTICE.

I.—General Statistics.

During the period of which a record has been kept, there occurred 360 cases. These 360 labours produced 368 children. There were thus 8 twin cases. 190 children were males: 178 females. 97 labours were primiparous: 263 were second or subsequent deliveries. Of the 360 deliveries, 154 took place between 6 A.M. and 6 P.M.; and 206 between 6 P.M. and 6 A.M. 11 children were born dead; and in three of these putrefaction was more or less advanced. There were 13 tedious and difficult labours. Instrumental aid—the forceps—was required thrice. Of the 360 cases, 31 were over before my arrival, and from their rapidity, the presentation may be presumed to have been natural. 11 cases were preternatural presentations, viz., 3 arm, 2 funis, 5 breech, and 1 face. Deducting these numbers, and also the twin cases from 360, there remain 310 cases of cranial presentation; but the position of the head unfortunately has not been noted. Ante-partum hemorrhage occurred twice at full period of utero-gestation; and post-partum hemorrhage also twice. There was only 1 case of puerperal convulsions. In one of the cases the mother was a mute. All the women recovered. No attempt was made at recording the duration of labour, from the difficulty—if not impossibility—in private practice of fixing the exact commencement of the parturient process. Both nurses and patients often err greatly in this point. Neither have I any record of the *ages* of my patients. This is a point which, in private practice, we must be often contented to remain in ignorance of.

TABLE I.—*Showing the Proportion of the above Particulars.*

Male children,	190 to 368 births,	being	$51\frac{2}{46}$ per cent.
Female do.,	178 to 368	...	$48\frac{17}{46}$ ...
Primiparous births,	97 to 360	...	$26\frac{17}{18}$ ...
Second and subsequent births,	263 to 360	...	$73\frac{1}{18}$ ...
Delivered between 6 a.m. and 6 p.m.,	154 to 360	...	$42\frac{7}{9}$ ...
——————— 6 p.m. and 6 a.m.,	206 to 360	...	$57\frac{2}{9}$ ...
Tedious and difficult labours ...	13 to 360	...	$3\frac{11}{18}$ ...
Forceps cases,	3 to 360	do.	being 1 in 120
Children born dead ...	11 to 360	...	$32\frac{8}{11}$
Preternatural presentations, ...	11 to 360	...	$32\frac{8}{11}$
Twin births,	8 to 360	...	45
Ante-partum hemorrhage, ...	2 to 360	...	180
Post-partum ...	2 to 360	...	180
Puerperal convulsions ...	1 to 360	...	360

II.—Special Statistics.

1st. *Tedious and Difficult Labours.*

Of this class of labours it has been stated there were thirteen cases. The causes generally were deficiency of uterine action, rigidity of soft parts, or largeness of child. In only one case was it malposition. *Nine* of the children

ere boys, and *four* girls. *Five* were primiparæ; and *eight* second or subsequent births. *Ten* were delivered by the natural powers, and *three* by the forceps. *Twelve* of the children were born alive, and *one* dead.

TABLE II.—*Showing particulars of Tedious and Difficult Labours.*

No. of Cases.	Sex of Child.	Primiparæ.	Second or subsequent Births.	Delivered by Nat. Powers.	Delivd. by Forceps.	Born alive.	Born dead.
13	9 B. 4 G.	5	8	10	3	12	1

2d. Children born Dead and Putrid.

Of the *eleven* children born dead, *five* were males and *six* females. In *eight* of these death seemed to have taken place during labour. In *three* it had occurred some time previous, as evidenced by advancing putrefaction. Of these latter, *two* were females and *one* male. In the *first* of these *three* cases, the death of the fœtus seemed to be owing to a severe convulsion fit experienced by the mother two or three weeks before its birth: in the *second*, to have been occasioned by dissipation on the part of the mother: and in the *third*, it appeared referrible to a syphilitic taint. In this last case the placenta was particularly soft, giving way on the slightest pressure.

3d. Preternatural Presentations.

A. *Arm Presentations.*—Three cases of arm presentation occurred, being 1 in 120 cases. All of these were unfortunate as regarded the child. In *two*, turning was performed by art, and in *one* by nature;—in other words, it fell to my lot to witness that rare effort of nature, spontaneous evolution or expulsion. In both of the cases in which turning was performed, I did not see the patient till after the waters were evacuated; the process was, therefore, accomplished with difficulty. In the third case, not only were the waters evacuated before I visited the patient (residing several miles distant in the country), but the uterus grasped the child with such vice-like firmness, as to render the introduction of the hand utterly impossible. The right shoulder was thrust firmly down into the cavity of the pelvis; the head was directed to the right, the breech to the left iliac fossa. The uterine contractions were extremely powerful, and almost unintermittent; indeed, I feared laceration of the uterus from excessive action. An anodyne was given on my arrival with a view of controlling the powerful uterine action; and, when, some time after, preparing to give another with the same intention, until I should procure the assistance of one of my brethren for the performance of evisceration (which seemed inevitable), I was suddenly summoned to the bedside, and found, to my surprise and joy, that spontaneous evolution had taken place. The breech was protruding; another pain expelled the abdomen and shoulders, and delivery was speedily accomplished. This result, occurring so suddenly and unexpectedly, and at a time when I felt myself in the most helpless and distressing predicament I ever was in since commencing the practice of midwifery, I greatly regret that I did not sufficiently observe the phenomena presented, so as to be able to say whether the process corresponded to the description given by Denman or Douglas.

But the impression left upon my mind decidedly is, that the protrusion of the arm was continued during the expulsion of the breech,—consequently, that the explanation of Dr Douglas is the correct one. The child was at the full time, and rather stout. It was dead. The mother made a good recovery.

B. *Funis Presentations.*—There were *two* cases of funis presentations or 1 to 180 cases. In the first, the head was so far down in the pelvis before I saw the patient, as to prevent the return of the cord into the uterus; and, as the labour was advancing rapidly, I did not deem it necessary to apply the forceps. Delivery was speedily accomplished, but the child was dead. In the second case, the membranes were ruptured before my attendance commenced; and, finding the os uteri well dilated and lax, the head high, the funis nearly pulseless, and the uterine action intermitted, I proceeded immediately to perform version, which was easily and speedily accomplished, but the child showed no signs of life.

C. *Breech Presentations.*—Exclusive of the twin cases, there were *five* cases of breech presentation, or 1 in 72. This proportion is of course increased if the twin cases are taken into account. In all these cases the breech was allowed to pass. In *three,* the children presented at first no symptoms of animation, but had respiration established under the employment of the usual measures; in the other two cases, they were vigorous from the first.

D. *Face Presentations.*—One case of this presentation occurred. The chin was directed to the pubis. Notwithstanding of this malposition, and of its being a primipara, delivery was accomplished in a comparatively short period. But, from the circumstance of the cord being tightly coiled around the neck, the child was dead.

4th. Twin Births.

Eight cases of twin births to 360 deliveries, or 1 in 45, is certainly a high proportion as compared with that given in published reports. From returns readily accessible to me, I have drawn up the following table, which exhibits a striking disparity between the result of my own practice and that of others.

TABLE III.—*Showing the Statistics of Twin Cases.*

Field of Practice.	Proportion of Cases.	Reporters.
1. Public.		
Dublin Lying-in Hospital,	1 in 64	Drs Hardy and M'Clintock.
British Lying-in Hospital,	1 in 85	Dr Lee, quoted by do.
University College Hospital,	1 in 156	Dr Murphy.
Maison d'Accouchement, Paris,	1 in 84	Quoted by Dr Burns.
Wurtemberg, . . .	1 in 86	Do. do.
2. Private.		
Glasgow, ...	1 in 63	Dr Maxwell Adams.
Maryhill, near Glasgow, .	1 in 182	John Stewart.
Montrose, ...	1 in 45	S. Lawrence.
Average—7 in 720, or 1 in $102\frac{6}{7}$; and 8 in 765, or 1 in $95\frac{5}{8}$.		

The first of these averages is *exclusive*, the second *inclusive*, of my own cases; and, even as compared with the higher of the two, my experience shows a proportion twice as large, while its relation to Dr Adams' return (the highest in the above table) is as $2\frac{2}{9}$ to $1\frac{37}{64}$ per cent. However, the great probability is, that the addition of one or two hundred cases to the 360 I have recorded, will very much diminish the proportion stated. I draw this conclusion from the *reverse fact*, that while the first 251 cases of my list gave only *three* twin births, or about 1 to 84, the remaining 109 gave *five* twin births, or fully 1 to 22. Just, therefore, as the proportion has been greatly increased by the last hundred cases presenting a *run* of twins, is it likely that it will be equally diminished during the next one or two hundred cases by a paucity of such births.

Of the 16 children produced by the 8 twin births, 13 were girls and 3 boys: in 5 cases 2 girls being born together, and in 3 a boy and a girl.

In 6 cases the placenta was single.

In 2 cases the placentæ were separate.

In 5 cases the patient had reached the full term of utero-gestation; in 2 the labour was premature; in 1 it was an abortion.

In 2 the labours were primiparous; in 6 second or subsequent. Two of the cases occurred consecutively to the same patient, who twice gave birth to two daughters within a year! (The first twins, born in the 8th month, did not survive.) The presentations cannot be classified, for in two cases they have unfortunately not been noted, and in two delivery was effected before my arrival. Of the remaining four cases, in one the child was delivered by the breech, the other by the head; in another, one of the children was by the foot, the other by the head; and in the remaining two both were head presentations. The longest period between the delivery of the children in any of the cases was an hour and half; the shortest ten minutes.

One of these twin cases (that of the abortion) deserves special mention from having been associated with a complication of not very frequent occurrence, dropsy of the amnion. The following is an abridgement of the notes I preserved of it:—Mrs ——— is four months gone in third pregnancy. At the end of the second month, she seemed larger than in due proportion to the period of pregnancy, but there was no abdominal pain, and the general health was good. The only peculiarity was, that the sickness incident to her state was much more severe than in either of her former pregnancies. About six weeks ago (between the second and third month) began to experience frequent pain in right lumbar and umbilical regions, which still persists. Her size since the occurrence of the pain has been rapidly increasing, and now she presents the appearance of a woman at the full period of utero-gestation. Fluctuation is well marked over the whole abdomen. Diagnosis, "Pregnancy with ascites." With the view of removing the latter, she was placed under the usual treatment, and, failing to derive any benefit from it, after eight or ten days met a medical friend in consultation on the case. He concurred in the diagnosis, and in the pending necessity for the performance of paracentesis. This operation was accordingly performed on Saturday at mid-day, and about six pounds of straw-coloured fluid were withdrawn. The stream through the canula was never full, and never clear, being always more or less tinged with

blood; frequently it was altogether interrupted by a substance which felt soft and spongy when turned aside by the probe, and from which hemorrhage to the amount of five or six ounces proceeded. For some time before the canula was withdrawn, only blood flowed through it. The hemorrhage having ceased, the canula was withdrawn, and the wound closed. The size of the abdomen was not one half reduced by the operation. *Second day.*—Passed a good night; but between eight and nine this morning, after a little exertion moving round in bed, there was slight hemorrhage per vaginam, followed by rigor and quick pulse, but no abdominal pain. At five P.M. I was summoned suddenly to the patient. About an hour previous, while turning in bed, the membranes burst, and an immense quantity of water was discharged. The bed was literally flooded. In half an hour after this discharge, labour pains came on, and ere I arrived two female fœtuses were expelled, and the half of a double placenta. I delivered the remainder. The quantity of blood lost was trifling. The fœtuses seemed to have been between the fourth and fifth month, and the membranes were of very great size. The uterus was quite contracted, and the abdomen now reduced to its natural dimensions. There was a little febrile excitement for a few days after this; but subsequently the case progressed favourably, excepting that suppuration in one of the mammæ retarded recovery for a time.

A case very similar to this one is recorded by Desmerais, and quoted by Dr Davis, wherein the same error of diagnosis was committed, and the same treatment pursued. Twenty-one days, however, elapsed between the tapping and the occurrence of labour, whereas in the above case the interval was only about twenty-eight hours. Desmerais' case, like my own, was one of twins, and so also was that of M. Devilliers.—(See *Dr Davis's Obstetric Medicine*).

One or two questions suggest themselves in connexion with such cases.

1st, What is the most probable cause of such monstrous accumulation?

2d, Are such cases always associated with twins; and what is the nature of this relation?

3d, How can such cases be best distinguished from pregnancy with ascites?

4th, When so distinguished, what is the best practice to be pursued?

5th, Is there any possibility of reducing the excess of the liquor amnii, without interrupting the process of utero-gestation?

5th. Labour with Complications.

A.—*Ante-partum Hemorrhage.*—It has been stated that only two cases of ante-partum hemorrhage occurred at the completion of pregnancy. Both were accidental, it having been my good fortune never to meet with any case of placental presentation. In both the hemorrhage was comparatively slight, and gave way as labour advanced.

B.—*Post-partum Hemorrhage.*—The only two cases of post-partum hemorrhage met with out of the 360 labours, occurred somewhat strangely on the same day. In each it occurred after the expulsion of the placenta. The flooding was very considerable in each of these cases, but was arrested by the usual remedies. In the second of them, in addition to the faintness and rapid pulse usually resulting from sudden loss of blood, there was immediate and great aberration of thought, which continued for upwards of two hours.

C.—*Puerperal Convulsions.*—The only instance of puerperal convulsions met with was in one of the twin cases. It occurred about an hour and a half after the birth of the second child, and was arrested immediately by venesection performed in the sitting posture.

I would, in closing this communication, advert to two points of practice, of which my experience is decidedly in favour, although I cannot offer any statistics regarding them. The first is gentle dilatation of the os uteri with the finger, when the pains are at all inefficient. That uterine action is often rendered much more brisk and effective in this manner, I entertain not the smallest doubt; while, on the other hand, I have never experienced any thing unfavourable to result from it. Query—Does the oxytoxic effect depend upon a reflex action being excited by the pressure of the finger, or upon the os uteri being placed in a more favourable position for being acted on by the longitudinal fibres of the body of the organ, when the os is pushed a little forward—just as the eye, when it has been deeply inverted by the internal rectus, cannot be advantageously acted on by the external rectus until it is first brought forward by the inferior oblique ?

The second point of practice referred to, is the method adopted to secure timely expulsion of the placenta. Besides directing pressure to be made over the uterus after the birth of the child, I invariably lay hold of the cord, and, without pulling, *retain it in a state of tension.* This seems to have the effect of exciting the uterus to speedy contraction; and to this practice I attribute the fact of the placenta being expelled in all my cases within ten or fifteen minutes, in the majority within five minutes, after the birth of the child. While it cannot explain the fact of my fortunately having met with no cases of retained placenta from adhesion, I think I am warranted to ascribe to this method of procedure the fact of my having met with no cases of placental retention from inertia, or irregular contraction of the uterus.

I may also state, what may seem almost too petty to mention, that I never use tape for tying the funis before the separation of the child, but always *strong sewing thread.* I was led to this from having got some serious frights at the outset of practice by the slipping of the tape, and the alarming, and to the child almost fatal, hemorrhage which ensued. I have known the same casualty to occur in the practice of others, from the same cause.

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